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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/760,619      | 01/20/2004  | Hun-young Ryu        | P2074US             | 9963             |

8968 7590 04/19/2006

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CHICAGO, IL 60606

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| EXAMINER |
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NGUYEN, TUAN HOANG

|          |              |
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| ART UNIT | PAPER NUMBER |
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2618

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |                                   |  |
|------------------------------|--------------------------------------|-----------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/760,619 | <b>Applicant(s)</b><br>RYU ET AL. |  |
|                              | <b>Examiner</b><br>Tuan H. Nguyen    | <b>Art Unit</b><br>2618           |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Objections***

Claim 16 is objected to because of the following informalities: claim 16 and claim 3 are identical, and they are both depend on claim 1. Examiner assume that claim 16 depend on claim 12. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 5, 8, 10-12, 13-14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant admitted prior art in view of Shigemasa et al. (U.S. PUB. 2003/0020525 hereinafter, "Shigemasa").

Regarding claim 1, applicant admitted prior art in the specification discloses a power supply having a stable reset function in a mobile electronic unit comprising a digital signal processing unit for processing a video signal or an audio signal input into the mobile electronic unit, the power supply comprising: a

Art Unit: 2618

power supply unit (item 14), which generates a plurality of source voltages ( $V_{d1}$ ,  $V_{d2}$ ,  $V_m$ ) needed in respective elements of the mobile electronic unit using an input power source supplied from an adapter (item 11) or battery (item 12) (see specification page 2 lines 12-19, Fig. 1); a first reset unit (item 17), which, when at least one output voltage from the power supply unit is abnormal, generates a first reset signal (see specification page 2 lines 12-19, Fig. 1). The prior art differs from the claimed invention in not specifically teaching for a second reset unit, which, when the input power source from the adapter or battery is less than a predetermined reference voltage, generates a second reset signal; and a controller which is reset by one of the first and second reset signals, and when the second reset signal is applied thereto, controls the power supply unit to cut off the source voltage for the digital signal processing unit. However, Shigemasa teaches for a second reset unit, which, when the input power source from the adapter or battery is less than a predetermined reference voltage, generates a second reset signal (page 8 [0123]); and a controller which is reset by one of the first and second reset signals, and when the second reset signal is applied thereto, controls the power supply unit to cut off the source voltage for the digital signal processing unit (page 1 [0010] through [0012]). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the prior art for a second reset unit, which, when the input power source from the adapter or battery is less than a predetermined reference voltage, generates a second reset signal; and a controller which is reset by one of the first and second reset signals, and when the second reset signal is applied

Art Unit: 2618

thereto, controls the power supply unit to cut off the source voltage for the digital signal processing unit, as per teaching of Shigemasa, because it provides a power-on reset circuit which outputs a reliable and effective reset signal even in case where the rising of electric power obtained from an external power supply source varies.

Regarding claims 5 and 18, applicant admitted prior art in the specification further discloses the mobile electronic unit is a digital camera (see specification page 2 lines 12-19, Fig. 1).

Regarding claim 8, applicant admitted prior art in the specification discloses a power supply having a stable reset function in a mobile electronic unit comprising a digital signal processing unit (item 15); a power supply unit (item 14); a first reset unit (item 17); and a controller (item 16) (see specification page 2 lines 12-19, Fig. 1). The prior art differs from the claimed invention in not specifically teaching for a power supply having a stable reset function in a mobile electronic unit comprising a second reset unit. However, Shigemasa teaches for a power supply having a stable reset function in a mobile electronic unit comprising a second reset unit (page 8 [0123]). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the prior art for a power supply having a stable reset function in a mobile electronic unit comprising a second reset unit, as per teaching of Shigemasa, because it provides a power-on reset circuit which outputs a reliable

Art Unit: 2618

and effective reset signal even in case where the rising of electric power obtained from an external power supply source varies.

Regarding claim 10, applicant admitted prior art in the specification further discloses the power supply unit generates a plurality of source voltages for an element of the mobile electronic unit that uses an input power source supplied from an adapter or a battery (see specification page 2 lines 12-19, Fig. 1).

Regarding claim 11, applicant admitted prior art in the specification further discloses the first reset unit generates a first reset signal when at least one output voltage from the power supply unit is abnormal (see specification page 2 lines 12-19, Fig. 1).

Regarding claim 12, Shigemasa further discloses the second reset unit generates a first reset signal when an input power source from an adapter or a battery is less than a predetermined reference voltage (page 8 [0114] through [0119]).

Regarding claim 13, Shigemasa further discloses the controller is reset by means of a first and second reset signals (page 1 [0010] through [0012]).

Art Unit: 2618

Regarding claim 14, Shigemasa further discloses the controller is reset by a second reset signal and cuts off the source voltage for the digital signal processing unit (page 1 [0010] through [0012]).

3. Claims 2-3, 6-7, 15-16 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant admitted prior art in view of Shigemasa et al. (U.S. PUB. 2003/0020525 hereinafter, "Shigemasa") as applied to claims above and further in view of Grohgans et al. (US PAT. 5,940,747 hereinafter, "Grohgers").

Regarding claims 2 and 15, the applicant admitted prior art and Shigemasa, in combination, fails to disclose the predetermined reference voltage is a source voltage for the digital signal processing unit. However, Grohgans teaches the predetermined reference voltage is a source voltage for the digital signal processing unit (col. 5 line 52 through col. 6 line 4). Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Grohgans into view of the applicant admitted prior art and Shigemasa, in order to perform a carrier signal acquisition operation in a receiver of a wireless portable unit.

Regarding claims 3 and 16, Grohgans further discloses the predetermined reference voltage is the lowest positive source voltage among the plurality of the source voltages for the digital signal processing unit (Fig. 5 col. 7 lines 11-31).

Regarding claims 6 and 19, Grohgans further discloses the mobile electronic unit is a personal digital assistant (Fig. 1 col. 2 lines 15-18).

Regarding claims 7 and 20, Grohgans further discloses the mobile electronic unit is a mobile phone (Fig. 1 col. 2 lines 15-18).

4. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over applicant admitted prior art in view of Shigemasa et al. (U.S PUB. 2003/0020525 hereinafter, "Shigemasa") as applied to claims above and further in view of Chan (US PAT.6,920,528).

Regarding claim 9, the applicant admitted prior art and Shigemasa, in combination, fails to disclose the digital signal processing unit processes a video signal or an audio signal input in the mobile electronic unit. However, Chan teaches the digital signal processing unit processes a video signal or an audio signal input in the mobile electronic unit (col. 2 line 50 through col. 3 line 12). Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Chan into view of the applicant admitted prior art and Shigemasa, in order to perform a carrier signal acquisition operation in a receiver of a wireless portable unit.



***Allowable Subject Matter***

5. Claims 4 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

6. Any response to this action should be mailed to:

Mail Stop \_\_\_\_\_ (Explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Facsimile responses should be faxed to:

(571) 273-8300

Hand-delivered responses should be brought to:

Customer Service Window

Randolph Building

401 Dulany Street

Alexandria, VA 22313

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan H. Nguyen whose telephone number is (571) 272-8329. The examiner can normally be reached on 8:00Am - 5:00Pm.

Art Unit: 2618

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Maung Nay A. can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan Nguyen  
Examiner  
Art Unit 2643

  
NAY MAUNG  
SUPERVISORY PATENT EXAMINER